

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026765**Date Inspected:** 29-Nov-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted below.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Component**Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

West Line

This QA observed, at random intervals, ABF/JV qualified welder Salvador Sandoval #4671 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1004-R. This welding was performed to repair a base metal crack previously discovered by Quality Control personnel using the Magnetic Particle Testing (MT) method. This work was located at 14W-PP128-W3-LLH#2 and was performed in the flat position from the top of the "A" deck plate.

During welding, ABF Quality Control (QC) Pat Swain was noted monitoring the welding parameters. Welding parameters were recorded as (A=136).

This QA observed QC Pat Swain perform Magnetic Particle (MT) of the excavated weld at various increments of depth.

Final excavation measurements were recorded to be:

(D=25mm, L=170mm, W=25mm)

This repair was performed on a Seismic Performance Critical Member (SPCM) member.

This QA observed, at random intervals, ABF/JV qualified welder Jorge Lopez #6149 performing Shielded Metal

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1004-R. The joint being welded was a 20mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at 14W-PP128-W4-LLH#4 and was performed in the flat position from the top of the "A" deck plate.

During welding, ABF Quality Control (QC) Salvador Moreno was noted monitoring the welding parameters. Welding parameters were recorded as (A=136).

This welding was performed to repair a QCUT reject.

Approximately 8:00 this QA observed QC Salvador Moreno perform Magnetic Particle (MT) of the excavated weld at this panel point 14W-PP128-W4-LLH#4 location. Mr. Moreno recorded no rejectable indications at this time.

Excavation measurements were recorded to be:

(Y=286mm, D=13mm, L=85mm, W=30mm)

This joint is a Seismic Performance Critical Member (SPCM) member.

This QA observed, at random intervals, ABF/JV qualified welder Jorge Lopez #6149 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1004-R. The joint being welded was a 20mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at 14W-PP128-W4-LLH#3 and was performed in the overhead position from the bottom of the "A" deck plate.

During welding, ABF Quality Control (QC) Salvador Moreno was noted monitoring the welding parameters. Welding parameters were recorded as (A=131).

This welding was performed to repair a QCUT reject.

Approximately 11:10 this QA observed QC Salvador Moreno perform Magnetic Particle (MT) of the excavated weld at this panel point 14W-PP128-W4-LLH#3 location. Mr. Moreno recorded no rejectable indications at this time.

Excavation measurements were recorded to be:

(Y=580mm, D=10mm, L=110mm, W=30mm)

This joint is a Seismic Performance Critical Member (SPCM) member.

Observation of QCUT:

QC Pat Swain performed Ultrasonic Testing (UT) of the completed weld at:
14E-PP126.7-E2.9 -no recordable or rejectable indications.

Please see QCUT reports dated 11/29/11 for more information regarding these indications.

This QA verbally informed QA SPCM Lead, Daniel Reyes, of the issues noted in this report for compliance. For further details of issues of significance see QA SPCM Lead, Daniel Reyes, "Daily Inspection Report" (TL-6031) submitted for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Clifford, William

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer